August 30, 2017

Seeking Funding to Support a Regional Conference on the Science of Perfluorinated Chemicals, Public Health, & the Environment

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Drinking water systems in New Hampshire, New York, Vermont, and other locations in the northeast have been shut down due to contamination by perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These man-made chemicals belong to the broader class of poly- and perfluoroalkyl substances (PFAS). PFOA and PFOS have been the most extensively produced and studied of these perfluorinated chemicals. Both chemicals are very persistent in the environment and in the human body.

PFASs have been widely used to make consumer products more stain-resistant, waterproof, and/or nonstick. For example, PFASs have been used in the manufacture of products that:

- Keep food from sticking to cookware
- Make upholstered furniture, carpets, clothing, and other fabrics resistant to soil, stains, and water
- Make shoes, clothes, and mattresses more waterproof
- Keep food packaging from sticking to food
- Help fight fires at airfields and other places where petroleum-product-based fires might occur

Because they help reduce friction, they are also used by a variety of industries, such as aerospace, automotive, construction, and electronics factories or businesses. They have been included in products with the familiar trade names, Teflon, Gore-Tex, Stainmaster, and Scotchguard. They were key components of aqueous film-forming foams (AFFF) used for firefighting.

EPA has established a very low, 70 parts-per-trillion health advisory level for PFOA and PFOS (combined) because of concerns about their potential health risks. Several states, including Vermont, Minnesota, and New Jersey, have set or are considering setting lower standards. According to EPA, exposures to PFAS chemicals are known to have a number of adverse effects in laboratory animals and humans. They are readily absorbed through consumption of drinks and food that contain PFAS and can accumulate in the body. As a result, as people get exposed to PFAS from different sources over time, the level of these compounds in their bodies may increase to the point where they suffer from adverse health effects.

Studies indicate that PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in laboratory animals. Both chemicals have caused tumors in animal studies. The most consistent findings from human epidemiology studies are increased cholesterol levels among exposed populations, with more limited findings related to:

- Low infant birth weights
- Effects on the immune system
- Cancer (for PFOA)

• Thyroid hormone disruption (for PFOS)

NEWMOA has been very involved in assisting state and federal environmental and health agencies in the northeast with responding to the PFAS crisis in communities throughout the region since 2014 by organizing meetings, webinars, workshops, and monthly networking conference calls.

NEWMOA proposes to partner with NEIWPCC and NESCAUM to organize a regional science conference on PFAS that would take place in 2018 or 2019. The goals of the conference would be to:

- Ensure that local, state, and federal action to address PFAS contamination is informed by the most current and reliable science
- Facilitate networking and information sharing among key stakeholders on PFAS topics
- Identify important gaps in the science and policy to help inform future research Session topics would cover:
 - Current research on the health impacts of PFAS chemicals
 - The fate and transport of PFAS in the environment
 - Treatment and remediation options
 - Sampling and analysis for PFAS
 - Air, land, and water quality impacts and sources and their interactions
 - Alternatives to PFAS and what is known about their impacts and effectiveness

The invitees to the conference would include:

- Local, state, and federal government officials
- Academic researchers and students
- Consultants and vendors
- Companies that use, make, or sell products that contain PFAS or that use PFAS compounds to make other products
- Non-governmental and environmental organizations that are working on PFAS contamination and/or toxics in products issues

The conference would take place over two days and would include plenary and break-out sessions and an exhibit and poster area. There would be ample time during the breaks to allow for networking and exhibit and poster viewing. If funding is available, there would be a reception in the evening.

NEWMOA is seeking funding to assist in offsetting the staff costs required to organize the conference. The Association would charge both an attendee and an exhibitor registration fee which would be applied to conference costs such as space and food. The fee may be different for government, non-profit organizations, and students than for companies, consultants, and vendors. Conference co-sponsorship opportunities would also be available to assist in covering the cost for the conference. NEWMOA would seek co-sponsors among academic institutes and research centers, vendors, companies, NGOs, and consultants.

The three interstate organizations would rely on their networks to conduct outreach as well as those of the co-sponsors, exhibitors, and others to invite participation in the conference.